IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

pplicant(s)

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Gwang LEE, Young Hwan AHN, Ki Ho PARK and Hong Ki JUN

Serial No.

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For

10/550,301

ADENOSINE DEAMINASE INHIBITOR AND NOVEL BACILLUS SP. IADA-7 STRAIN WHICH PRODUCES IT

Filed

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September 22, 2005

Examiner

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Not Yet Assigned

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745 Fifth Avenue New York, NY 10151

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on January 3, 2006.

Ronald R. Santucci, Reg. No. 28,988

Name of Applicant, Assignee of Registered Representative)

Signature

January 3, 2006

Date of Signature

TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97(B)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

The Information Disclosure Statement submitted herewith is being filed within three months of the filing of a national application; within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 in an international application; or before the mailing date of a first Office Action on the merits, whichever event occurs last. No fee is required.

The filing of this Information Disclosure Statement is not an admission that the documents identified herein constitute prior art to the present application.

The Commissioner is authorized to charge any additional fee that may be required to Deposit Account No. 50-0320.

Respectfully submitted,

FROMMER LAWRENCE & HAUG LLP

By:

Ronald R. Santucci Reg. No. 28,988 (212) 588-0800

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ATTY. DOCKET NO.

930086-2014

APPLICANT

LEE, et al.

FILING DATE
September 22, 2005

SERIAL NO.

10/550,301

APPLICANT

LEE, et al.

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			OTHER REFERENCES (Including Author, Title, Journal Year, Vol.(#); Section: Pgs)						
		AA	Agarwal, et al.; Tight-Binding Inhibitors - IV. Inhibition of Adenosine Deaminases by Various Inhibitors"; Biochem Pharmacol. 19 Mar 1; 26(5): 359-67						
·		AB	Aldrich, et al.; "The importance of Adenosine Deaminase for Lymphocyte Development and Function"; Biochem Biophys Res Commun. 2000 Jun 7; 272(2):311-5						
		AC	Bielat, et al.; "ECTO-enzyme activity of human erythrocyte adenosine deaminase"; Mol Cell Biochem. 1989 Apr 11;86(2):135-42						
		AD	Borroto-Esoda, et al.; "In vitro Combination of Amdoxovir and the Inosine Monophosphate Dehydrogenase Inhibitors Mycophenolic Acid and Ribavirin Demonstrates Potent Activity against Wild-Type and Drug-Resistant Variants of Human Immunodeficiency Virus Type 1"; Antimicrob Agents Chemother. 2004 Nov; 48(11): 4387-94						
		ΑE	Ciruela, et al.; "Adenosine deaminase affects ligand-induced signaling by interacting with cell surface adenosine receptors"; FEBS Lett. 1996 Feb 19; 380(3): 219-23						
		AF	Cristalli, et al.; "Adenosine Deaminase Functional Implication and Different Classes of Inhibitors"; Med Res Rev. 2001 Mar; 21(2): 105-28						
		AG	Daddona, Peter E.; "Human Adenosine Deaminase: Properties and Turnover in Cultured T and B Lymphoblasts"; J Biol Chem. 1981 Dec 10; 256(23): 12496-501						
		АН	Daluge, et al.; "1592U89, a Novel Carbocyclic Nucleoside Analog with Potent, Selective Anti-Human Immunodeficiency Virus Activity"; Antimicrob Agents Chemother 1997 May; 41(5): 1082-93						
		Al	Dolezelova, et al., "The emerging role of adenosine deaminases in insect"; Insect Biochem Mol. boil. 2005 May; 35(5):381-9						
		AJ	Fernandez, et al., "Adenosine Dearninase Isoenzymes and Neopterin in Liver Cirrhosis"; J Clin Gastroenterol. 2000 Mar; 30(2): 181-6						
		AK	Franco, et al.; Enzymatic and extra enzymatic role of ecto-adenosine deaminase in lymphocytes"; Immunol Rev. 1998 Feb; 161: 27-42						
		AL	Giblett, et al.; "Adenosine-Deaminase deficiency in two patients with severely impaired cellular immunity"; Lancet. 1972 No. 2(7786): 1067-9						
		AM	Grant, et al.; "Dialdehydes derived from Adenine Nucleosides as Substrates and Inhibitors of Adenosine Aminohydrolase";						
		AN	Guan, et al.; "Spiro pentane Mimics of Nucleosides: Analogues of 2'- Deoxyandenosine and 2'-Deoxyguanosine. Synthesis of All Stereoisomer, Isomeric Assignment, and Biological Activity						
		AP	Hirschhorn, et al.; "Adenosine Deaminase Activity in Normal Tissues and Tissues from a child with severe Combined Immunodeficiency and Adenosine Deaminase Deficiency"; Clin Immunol Immunopathol. 1978 Mar, 993: 287-92						
		Hirschhorn, Rochelle; "Overview of Biochemical Abnormalities and Molecular Genetics of Adenosine Deaminase Deficiency"; Pedia Res. 1993 Jan; 33 (1 Suppl): S35-41							
		AR	Ho, et al., "Enzyme Activities of Leukemic Cells and Biochemical Changes Induced by Deoxycoformycin In Vitro- Lack of correlation with cynical Response", Leuk Res. 1989; 13(4): 269-78						
<u></u>	AS Kelly, et al.; "Primary structure of bovine adensine deaminase"; (Abstract) J Pharm Biomed Anal. 1996 Aug; 14(1								
		AT	Kelly, et al.; "Primary structure of bovine adensine deaminase"; J Pharm Biomed Anal. 1996 Aug; 14(11):1513-9						
EXAMINER			DATE CONSIDERED						

• EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Based on Form PTO-1449				ATTY. DOCKET NO.	SERIAL NO.				
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	LIST OF REF	EREN	CES CITED BY APPLICANT	APPLICANT					
(Use several sheets if necessary)				LEE, et al.					
				FILING DATE September 22, 2005	GROUP Not Yet Assigned				
			OTHER REFERENCES (Including Au	uthor, Title, Journal Year; Vol.(#); Section: Pgs)					
	1	٩V	Kodama, et al.; "Antileukemic Activity and M Positive (TdT+) Leukemic Cells"; Biochem F	Mechanism of Action of Cordycepin against Terminal Deoxynucleotidyl Transferase- Pharmacol. 2000 Feb 1; 59(3): 273-81					
	A	١W	Lerner, et al.; "Inhibition of Adenosine Deam 11(15):2772-7	minase by Alcohols Derived from Adenine Nucleosides"; biochemistry. 1972 Jul 18;					
	1	AX	Mills, et al.; "Purine metabolism in adenosing	e deaminase deficiency"; Proc Natl Acd Aci	U S A. 1976 Aug, 73(8): 2867(71)				
		AY	Mitchell, et al.; "Inhibition of Adensine Dear 56(3) 556-9	minase Activity Results in Cytotoxicity to T	Lymphoblasts In Vivo"; Blook. 1980 Sep;				
		AZ	Pragnacharvulu, et al.; "Adenosine Deaminase Inhibitors: Synthesis and Biological Evaluations of Unsaturated., Aromatic, and Derivatives of (+) -erythro-9-(2'S-Hydroxy-3' R-nonyl) adenine [(+)] -EHNA]; Biochem Biophys Res Commun. 2000 Jun 7; 272(2):311-5						
	,	AB	Sawynok, et al.; "Peripheral Antinociceptive effect of an adensine kinase inhibitor, with augmentation by an adenosine deamin inhibitor, in the rat formalin test"; Pain. 1998 Jan; 74(1):75-81						
_		AC	Shi, et al.; "Diverse Genetic Regulatory Mot Chem. 1997 Jan 24; 272(4):2334-41	ifs Required for Murine Adenosine Deamina	se Gene Expression in the Placenta"; J Biol				
		AD	Tanaka, et al.; "Potentiation of Cytotoxicity and Antitumor Activity of Adenosine Analogs by the Adenosine Deaminase Inihibitor Adecypenol"; J Antibot (Tokyo). 1989 Nov; 42(11):1722-4						
		AE	Tritsch, George L.; "Validity of the Continuous Spectrophotometric Assay of Kalckar for Adenosine Deaminase Activity"; Anal Biochem. 1983 Feb 15; 129(1): 207-9						
		AF	TuNac, et al.; "2' Chloropentostatin: Discovery, Fermentation and biological Activity"; J Antibiot (Tokyo). 1985 Oct; 38(10): 1344-9						
		AG	Vellard, Michael; "The enzyme as drug: application of enzymes as pharmaceuticals"; Curr Opin Biotechnol. 2003 Aug; 14(4): 444-						
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EXAMINER				DATE CONSIDERED					
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Based on Form PTO-1449 (3/90) LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)					ATTY. DOCKET 1 930086-2	SERIAL NO. 10/550,301				
					APPLICANT LEE, et al.					
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